

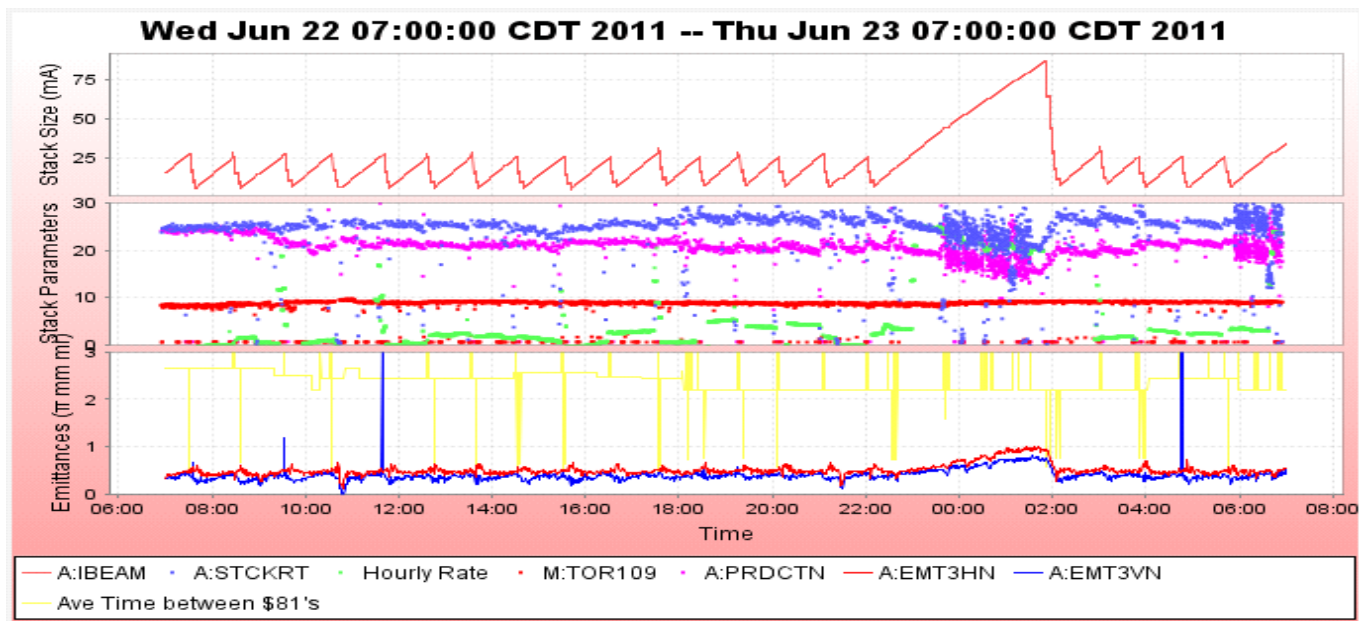
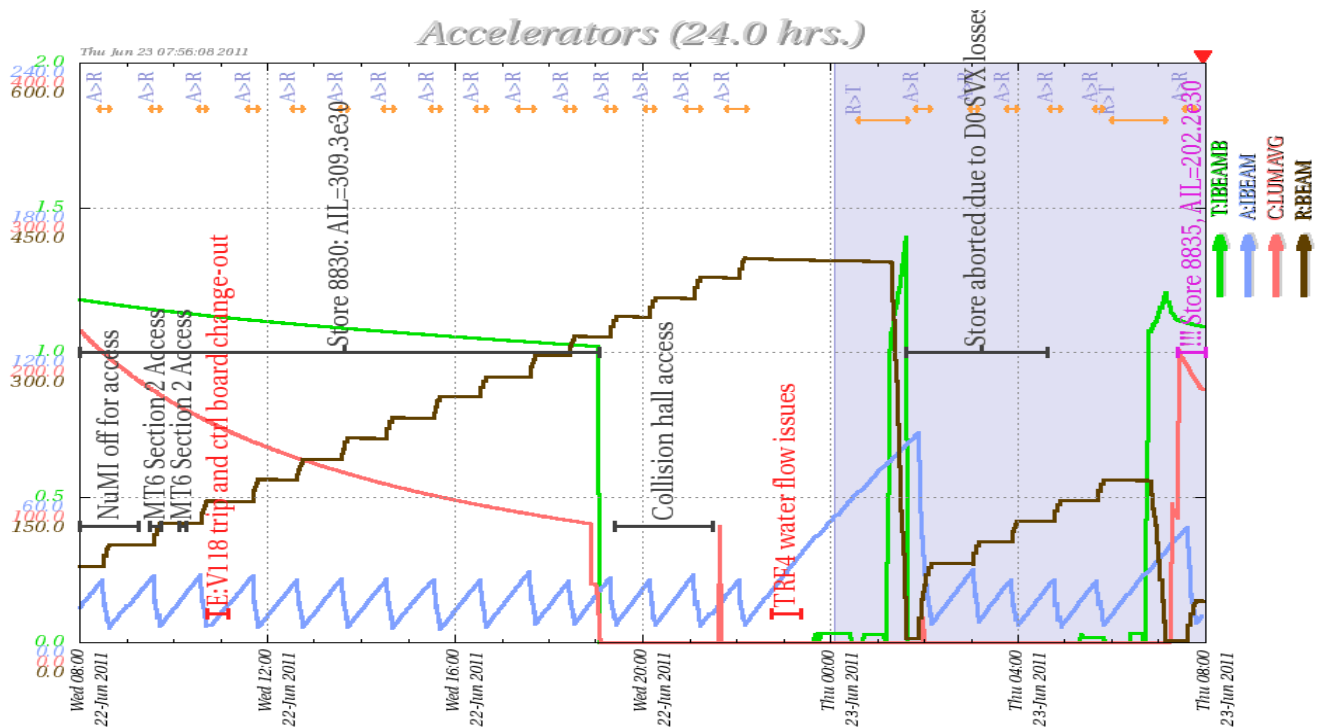
2011-06-23 Thursday Morning Notes

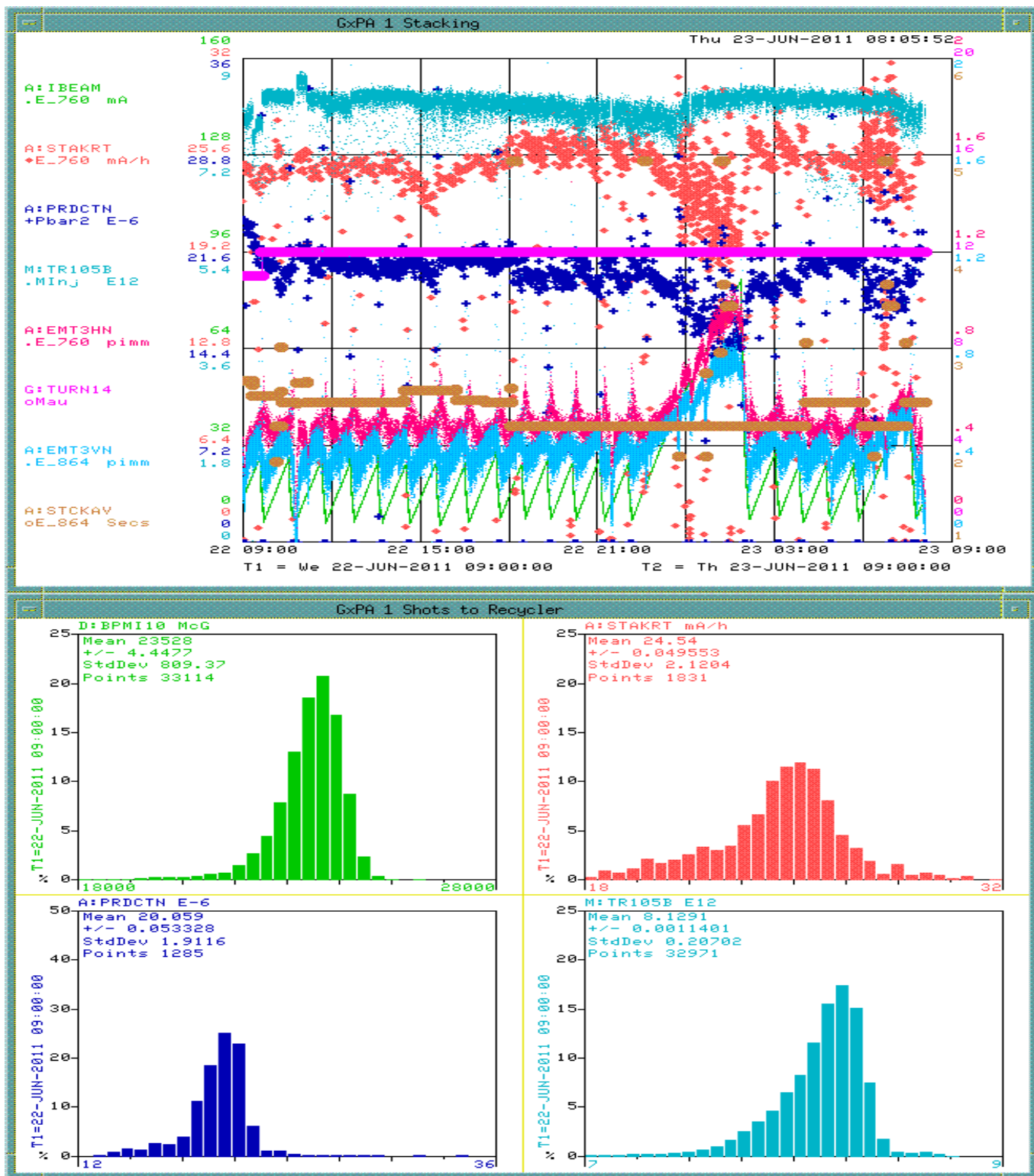
Thursday, June 23, 2011
7:52 AM

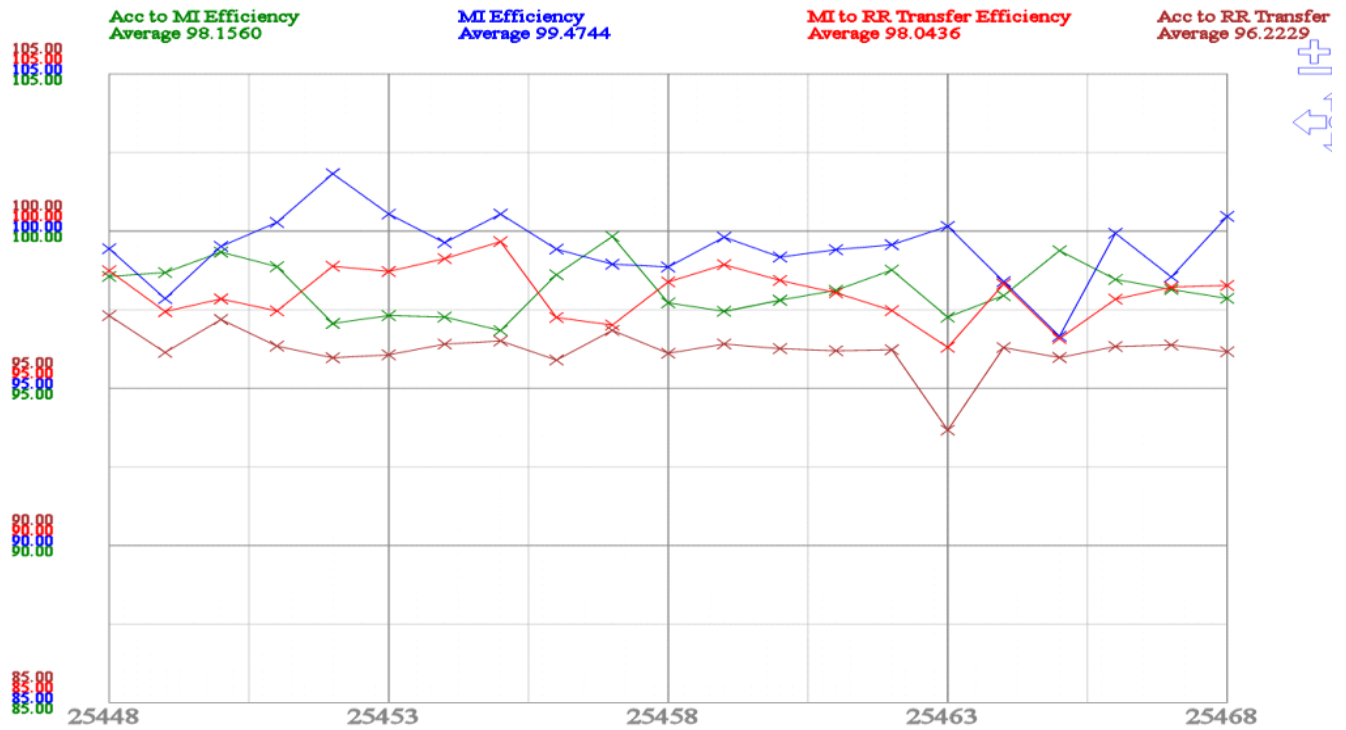
Numbers

- Stacking
 - Pbars stacked: 568.50 E10
 - Time stacking: 23.76 Hr
 - Average stacking rate: 23.93 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 35586
 - Number of pulses with beam: 34432
 - Fraction of up pulses was: 96.76%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 22.99 Hr
 - Possible average stacking rate: 24.73 E10/Hr
 - Could have stacked: 587.55 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 553.86 E10
 - Number of transfers : 66
 - Number of transfer sets: 21
 - Average Number of transfer per set: 3.14
 - Time taken to shoot including reverse proton tuneup: 00.23 Hr
 - Transfer efficiency: 95.71%
- Other Info
 - Average POT : 8.11 E12
 - Average production: 20.37 pbars/E6 protons

Plots







| Column 1 Number _0_Pbar Transfer Shot # | Column 4 Number_3 Transfer Time | | | Column 21 Number _20_A-I BEAMB sampled on \$91 (A:BEA M7), E10 | Column 22 Number _21_A-I BEAMB sampled on \$94 (A:BEA M9), E10 | Unstacked (mA) | Column 23 Number _22_R-B EAMS (R:BEA ME0[0]) pre xfer E10 | Column 24 Number _23_R-B EAM (R:BEA ME0[1]) post xfer, E10 | Stashed | Acc to RR Eff | Acc to MI Eff | Acc to MI2 Eff | Acc to MI * Acc to MI2 Efficiency | Transfers | Sets | Column 5 Number_4_Acc Horizontal Emittance | Column 6 Number_5_Acc Vertical Emittance | Column 8 Number_7_Acc Longitudinal Emittance |
|---|---------------------------------|-------|-------|---|---|-------------------|--|--|---------|------------------|---------------|----------------|---|-----------|-------|---|---|---|
| Totals => | | | | | 538.69 | | | | 515.87 | 95.76% | 97.92% | 97.54% | 95.51% | 64 | 20 | 4.8313 | 3.567 | 2.0241 |
| Daily Average => | | | | | 538.69 | | | | 515.87 | | | | | 64 | 20 | | | |
| 25468 | Thursday, June 23, 2011 | 7:36 | 48.07 | 8.16 | 43.58 | 1.67 | 43.21 | 41.82 | 95.95% | 97.71% | 97.82% | 95.58% | 4 | 1 | 5.109 | 3.843 | 1.982 | |
| 25467 | Thursday, June 23, 2011 | 5:41 | 26.25 | 6.96 | 21.87 | 147.08 | 168.15 | 21.12 | 96.57% | 98.62% | 97.43% | 96.09% | 3 | 1 | 4.777 | 3.373 | 2.027 | |
| 25466 | Thursday, June 23, 2011 | 4:46 | 26.45 | 6.60 | 22.45 | 125.84 | 147.30 | 21.61 | 96.28% | 98.51% | 98.00% | 96.54% | 3 | 1 | 4.546 | 3.393 | 2.05 | |
| 25465 | Thursday, June 23, 2011 | 3:51 | 26.25 | 6.65 | 22.22 | 104.71 | 126.01 | 21.39 | 96.29% | 99.22% | 96.45% | 95.70% | 3 | 1 | 4.905 | 3.66 | 2.034 | |
| 25464 | Thursday, June 23, 2011 | 3:02 | 30.27 | 8.61 | 24.31 | 81.62 | 104.89 | 23.40 | 96.24% | 98.03% | 97.17% | 95.26% | 3 | 1 | 4.991 | 3.937 | 2.035 | |
| 25463 | Thursday, June 23, 2011 | 1:52 | 87.12 | 7.54 | 84.65 | 4.53 | 81.99 | 78.38 | 92.60% | 96.34% | 96.48% | 92.95% | 6 | 1 | 6.216 | 4.544 | 1.945 | |
| 25462 | Wednesday, June 22, 2011 | 22:03 | 26.44 | 7.09 | 21.82 | 377.45 | 398.10 | 21.03 | 96.36% | 98.28% | 98.07% | 96.38% | 3 | 1 | 4.672 | 3.364 | 2.032 | |
| 25461 | Wednesday, June 22, 2011 | 21:06 | 28.16 | 7.07 | 23.78 | 356.17 | 378.77 | 22.95 | 96.53% | 98.25% | 98.23% | 96.51% | 3 | 1 | 4.575 | 2.877 | 1.996 | |
| 25460 | Wednesday, June 22, 2011 | 20:09 | 26.22 | 7.24 | 21.60 | 337.02 | 357.52 | 20.82 | 96.37% | 98.00% | 97.18% | 95.24% | 3 | 1 | 4.723 | 3.63 | 2.035 | |
| 25459 | Wednesday, June 22, 2011 | 19:18 | 27.29 | 7.53 | 22.33 | 316.56 | 337.87 | 21.57 | 96.57% | 97.68% | 97.94% | 95.66% | 3 | 1 | 4.823 | 3.754 | 2.081 | |
| 25458 | Wednesday, June 22, 2011 | 18:26 | 25.94 | 7.58 | 21.02 | 297.30 | 317.32 | 20.22 | 96.18% | 97.75% | 96.75% | 94.57% | 3 | 1 | 4.742 | 3.603 | 2.04 | |
| 25457 | Wednesday, June 22, 2011 | 17:35 | 29.77 | 7.91 | 24.47 | 274.61 | 297.99 | 23.68 | 96.78% | 99.65% | 98.49% | 98.15% | 3 | 1 | 4.755 | 3.471 | 2.031 | |
| 25456 | Wednesday, June 22, 2011 | 16:32 | 26.16 | 6.64 | 22.11 | 254.25 | 275.31 | 21.21 | 95.96% | 98.40% | 97.93% | 96.36% | 3 | 1 | 4.824 | 3.784 | 2.053 | |
| 25455 | Wednesday, June 22, 2011 | 15:33 | 26.49 | 5.60 | 23.37 | 232.51 | 254.84 | 22.54 | 96.44% | 97.13% | 98.04% | 95.23% | 3 | 1 | 4.947 | 3.598 | 2.01 | |
| 25454 | Wednesday, June 22, 2011 | 14:32 | 26.39 | 6.29 | 22.56 | 211.39 | 232.99 | 21.78 | 96.56% | 97.06% | 97.20% | 94.34% | 3 | 1 | 4.74 | 3.337 | 2.017 | |
| 25453 | Wednesday, June 22, 2011 | 13:35 | 26.84 | 6.40 | 22.96 | 189.79 | 211.78 | 22.10 | 96.26% | 97.27% | 97.77% | 95.10% | 3 | 1 | 4.759 | 3.504 | 2.031 | |
| 25452 | Wednesday, June 22, 2011 | 12:38 | 26.29 | 6.50 | 22.38 | 168.78 | 190.12 | 21.50 | 96.04% | 97.44% | 98.20% | 95.68% | 3 | 1 | 4.709 | 3.32 | 2.035 | |
| 25451 | Wednesday, June 22, 2011 | 11:41 | 27.66 | 6.34 | 23.73 | 146.30 | 169.03 | 22.89 | 96.46% | 99.22% | 98.81% | 98.04% | 3 | 1 | 4.459 | 3.442 | 2.023 | |
| 25450 | Wednesday, June 22, 2011 | 10:34 | 28.22 | 6.99 | 23.71 | 123.65 | 146.54 | 23.04 | 97.18% | 99.27% | 98.60% | 97.89% | 3 | 1 | 4.786 | 3.487 | 2.005 | |
| 25449 | Wednesday, June 22, 2011 | 9:35 | 28.04 | 6.66 | 23.76 | 101.16 | 123.86 | 22.81 | 96.01% | 98.96% | 96.57% | 95.56% | 3 | 1 | 4.567 | 3.419 | 2.02 | |

| Column 1 Number _0_Pbar Transfer Shot # | Column 4 Number_3_ Transfer Time | Column 21 Number _20_A:1 BEAMB sampled on \$91 (A:BEA M7), E10 | Column 22 Number _21_A:1 BEAMB sampled on \$94 (A:BEA M9), E10 | Unstacked (mA) | Column 23 Number _22_R:B EAMS (R:BEA ME0[0]) pre sfer E10 | Column 24 Number _23_R:B EAM (R:BEA ME0[1]) post sfer, E10 | Stashed | Acc to RR Eff | Acc to MI Eff | Acc to MI2 Eff | Acc to MI * Acc to MI2 Efficiency | Trans fers | Sets | Column 5 Number_ 4_Acc Horizontal Emittanc e | Column 6 Number _5_Acc Vertical Emittanc e | Column 8 Number _7_Acc Longitu dinal Emittanc e |
|---|----------------------------------|---|---|-------------------|--|---|---------|------------------|---------------|----------------|---|---------------|------|---|---|---|
| | Totals => | | | 410.46 | | | 395.67 | 96.40% | 98.27% | 97.72% | 96.04% | 54 | 18 | 4.7389 | 3.4974 | 2.0308 |
| | Daily Average => | | | 410.46 | | | 395.67 | | | | | 54 | 18 | | | |

| | | | | | | | | | | | | | | | | | |
|-------|--------------------------|-------|-------|------|-------|--------|--------|-------|--------|--------|--------|--------|---|---|-------|-------|-------|
| 25467 | Thursday, June 23, 2011 | 5:41 | 26.25 | 6.96 | 21.87 | 147.08 | 168.15 | 21.12 | 96.57% | 98.62% | 97.43% | 96.09% | 3 | 1 | 4.777 | 3.373 | 2.027 |
| 25466 | Thursday, June 23, 2011 | 4:46 | 26.45 | 6.60 | 22.45 | 125.84 | 147.30 | 21.61 | 96.28% | 98.51% | 98.00% | 96.54% | 3 | 1 | 4.546 | 3.393 | 2.05 |
| 25465 | Thursday, June 23, 2011 | 3:51 | 26.25 | 6.65 | 22.22 | 104.71 | 126.01 | 21.39 | 96.29% | 99.22% | 96.45% | 95.70% | 3 | 1 | 4.905 | 3.66 | 2.034 |
| 25464 | Thursday, June 23, 2011 | 3:02 | 30.27 | 8.61 | 24.31 | 81.62 | 104.89 | 23.40 | 96.24% | 98.03% | 97.17% | 95.26% | 3 | 1 | 4.991 | 3.937 | 2.035 |
| 25462 | Wednesday, June 22, 2011 | 22:03 | 26.44 | 7.09 | 21.82 | 377.45 | 398.10 | 21.03 | 96.36% | 98.28% | 98.07% | 96.38% | 3 | 1 | 4.672 | 3.364 | 2.032 |
| 25461 | Wednesday, June 22, 2011 | 21:06 | 28.16 | 7.07 | 23.78 | 356.17 | 378.77 | 22.95 | 96.53% | 98.25% | 98.23% | 96.51% | 3 | 1 | 4.575 | 2.877 | 1.996 |
| 25460 | Wednesday, June 22, 2011 | 20:09 | 26.22 | 7.24 | 21.60 | 337.02 | 357.52 | 20.82 | 96.37% | 98.00% | 97.18% | 95.24% | 3 | 1 | 4.723 | 3.63 | 2.035 |
| 25459 | Wednesday, June 22, 2011 | 19:18 | 27.29 | 7.53 | 22.33 | 316.56 | 337.87 | 21.57 | 96.57% | 97.68% | 97.94% | 95.66% | 3 | 1 | 4.823 | 3.754 | 2.081 |
| 25458 | Wednesday, June 22, 2011 | 18:26 | 25.94 | 7.58 | 21.02 | 297.30 | 317.32 | 20.22 | 96.18% | 97.75% | 96.75% | 94.57% | 3 | 1 | 4.742 | 3.603 | 2.04 |
| 25457 | Wednesday, June 22, 2011 | 17:35 | 29.77 | 7.91 | 24.47 | 274.61 | 297.99 | 23.68 | 96.78% | 99.65% | 98.49% | 98.15% | 3 | 1 | 4.755 | 3.471 | 2.031 |
| 25456 | Wednesday, June 22, 2011 | 16:32 | 26.16 | 6.64 | 22.11 | 254.25 | 275.31 | 21.21 | 95.96% | 98.40% | 97.93% | 96.36% | 3 | 1 | 4.824 | 3.784 | 2.053 |
| 25455 | Wednesday, June 22, 2011 | 15:33 | 26.49 | 5.60 | 23.37 | 232.51 | 254.84 | 22.54 | 96.44% | 97.13% | 98.04% | 95.23% | 3 | 1 | 4.947 | 3.598 | 2.01 |
| 25454 | Wednesday, June 22, 2011 | 14:32 | 26.39 | 6.29 | 22.56 | 211.39 | 232.99 | 21.78 | 96.56% | 97.06% | 97.20% | 94.34% | 3 | 1 | 4.74 | 3.337 | 2.017 |
| 25453 | Wednesday, June 22, 2011 | 13:35 | 26.84 | 6.40 | 22.96 | 189.79 | 211.78 | 22.10 | 96.26% | 97.27% | 97.77% | 95.10% | 3 | 1 | 4.759 | 3.504 | 2.031 |
| 25452 | Wednesday, June 22, 2011 | 12:38 | 26.29 | 6.50 | 22.38 | 168.78 | 190.12 | 21.50 | 96.04% | 97.44% | 98.20% | 95.68% | 3 | 1 | 4.709 | 3.32 | 2.035 |
| 25451 | Wednesday, June 22, 2011 | 11:41 | 27.66 | 6.34 | 23.73 | 146.30 | 169.03 | 22.89 | 96.46% | 99.22% | 98.81% | 98.04% | 3 | 1 | 4.459 | 3.442 | 2.023 |
| 25450 | Wednesday, June 22, 2011 | 10:34 | 28.22 | 6.99 | 23.71 | 123.65 | 146.54 | 23.04 | 97.18% | 99.27% | 98.60% | 97.89% | 3 | 1 | 4.786 | 3.487 | 2.005 |
| 25449 | Wednesday, June 22, 2011 | 9:35 | 28.04 | 6.66 | 23.76 | 101.16 | 123.86 | 22.81 | 96.01% | 98.96% | 96.57% | 95.56% | 3 | 1 | 4.567 | 3.419 | 2.02 |